

REMARKS

In the Office Action of August 11, 2006, the Examiner correctly affirmed the applicant's election of claims 1-6, 37-38 and 42-47 as included in the reply filed on May 5, 2006.

In the Office Action, claims 1-6, 37-38 and 42-44 were rejected under 35 USC §103(a) as being unpatentable over the combination of the Rector U.S. Patent No. 6,115,676 in view of the Budike U.S. Patent No. 6,311,105. Reconsideration of the claim rejections in view of the preceding amendments to the claims, and in further view of the following arguments for allowance, is respectfully requested.

The subject matter of independent claims 1, 37, 38 and 42 is directed to a method and system that allows a program to be created at the utility of a commodity where the program is aimed at managing the overall demand for the commodity by the user of the commodity. As defined by the claims, the utility delivers the commodity to at least one customer site where the customer site has a plurality of devices that each consumes the commodity. In addition to having the plurality of devices consuming the commodity, the customer site may also include a metering device that monitors the amount of total commodity consumption at the customer site. However, in accordance with the specification, control over the consumption of each of the devices is maintained. Each of the claims in the application indicate that a program is defined at the utility where the program includes a subset of the plurality of devices at the customer site for which usage of the commodity may be managed by activating the program developed at the utility.

During the delivery of the commodity to the plurality of devices at the customer site, the instantaneous rate at which the commodity is being delivered to each of the devices of the subset of devices is measured and an instantaneous rate is sent to the utility. Based upon the instantaneous rate of consumption for each of the devices within the subset, the utility can determine, in real time, the commodity consumption by the subset of devices. Thus, if the utility desires to reduce the

demand for the commodity, a capacity associated with the delivery of the commodity to at least the subset of devices is known at the utility. If the utility decides to activate the program, the amount of the commodity currently being consumed by the subset of devices is made available for interruption by activating the program defined at the utility. In this manner, the utility can reduce commodity demand by selectively activating the program that includes the subset of devices contained at the customer site.

In rejecting independent claims 1, 37, 38 and 42, the Examiner stated that the Rector '676 patent disclosed a method for providing at least one program to a utility of a commodity where the program is aimed at managing demand for the commodity. This limitation is included in the preamble of each of the independent claims rejected by the Examiner. The applicant hereby objects to such finding by the Examiner.

The Rector '676 patent is directed to a metering system, such as found in a residential home, that can be used for recording energy consumption and sending the consumption data to a control center for billing purposes (Col. 3, lines 46-54). The Rector '676 patent discloses that the metering device contains a register or memory and a clock such that the metering device can record energy consumption in non-volatile memory and report these intervals to a control center (Col. 7, lines 39-49). As described in the Rector '676 patent, the primary focus of the subject matter of the '676 patent is directed to reducing energy consumption of a residence after the utility customer has relocated. Specifically, the disclosure addresses allowing the utility to monitor the energy consumed by the load after the utility customer has left and comparing the consumption to a threshold. If the utility consumption exceeds the threshold, the utility may then elect to disconnect service to the customer. This routine allows the utility to predetermine an energy consumption amount that the utility is willing to absorb after a customer has moved out and prior to a new customer moving into the location (Col. 2, lines 40-50). If the utility determines that a threshold is exceeded, the utility may issue a load control command to disconnect service to the

customer site. The Rector '676 patent discloses that the data captured by the metering device and stored in the register can be used to verify that a load control command, which terminates service to the customer, has been carried out by the meter. Thus, the Rector '676 patent is directed to only the confirmation that a disconnect signal was received and executed following a threshold being exceeded. The Rector '676 patent clearly does not teach or suggest providing a program to a utility of a commodity where the program is aimed at selectively managing demand for the commodity, as required by each of the independent claims in the present application.

Each of the independent claims 1, 37, 38 and 42 has been amended to indicate that a program is defined at a utility where the program includes a subset of the plurality devices at the customer site for which usage of the commodity may be managed by activating the program. In rejecting the independent claims, the Examiner stated that the Rector '676 patent taught the step of defining a program as required by the independent claims. Specifically, the Examiner referred to Col. 10, lines 13-23 of the patent specification. In this portion of the Rector '676 patent, the disclosure teaches that the utility may send a shut off signal to a meter. The disclosure teaches that the meter, in response to receiving the shut off signal, will send information back to the utility that includes pulses for the minute before, minute during and minute after the shut off command is received. In this manner, the utility is able to confirm that a shut off signal was received and acted upon by the receiving meter. The Rector '676 patent clearly does not teach or suggest defining a program at the utility that includes a subset of the plurality of devices at the customer site for which usage of the commodity may be managed by activating a program. Instead, the Rector '676 patent teaches only sending a shut off signal to the power supply meter for the residence and monitoring to assure that the power to the household has been interrupted.

In rejecting the independent claims, the Examiner also stated that the Rector '676 patent taught measuring the instantaneous rate at which the commodity is being

delivered to each device of the subset of devices. As discussed above, the Rector '676 patent does not teach or suggest delivering an instantaneous rate at which the commodity is being delivered to each device of the subset of the devices as required by the independent claims. Instead, the Rector '676 reference discloses that electrical consumption information for the entire residence serviced by the electric meter is delivered to the utility at standard time intervals. In the independent claims 1, 37, 38 and 42 of the present application, the system and method claimed requires measuring the "instantaneous rate" that the commodity is being delivered to each device of the subset and sending that instantaneous rate to the utility. The instantaneous rate of consumption measurement and sending of that measurement to the utility is not disclosed by the Rector '676 patent cited by the Examiner in the Office Action.

As the Examiner correctly indicated, the Rector '676 patent does not disclose many of the features required by independent claim 1, 37, 38 and 42. To show these features of the claims, the Examiner has relied upon the Budike '105 patent. In relying upon the Budike '105 patent, the Examiner has stated that the Budike reference teaches determining, in real time, a capacity associated with the delivery of the commodity which may be available for management by activating the program defined at the utility. The applicant hereby objects to such finding by the Examiner.

Initially, the Budike '105 patent is directed to a control system that monitors the internal consumption of different and multiple utility commodities within a building, campus or building complex. The system defines a multi-utility master meter (1) that includes a central processing unit (10) that receives information from sensors positioned on various utility meters contained within the facility being managed. The multi-utility master meter is in communication with a computer 39 to provide the meter data to the computer 39 such that the computer 39 at the facility being monitored can be utilized to identify sudden surges, losses, equipment stoppages within the system (Col. 10, lines 10-15).

As amended, each of the independent claims specifically states that the capacity associated with the delivery of the commodity to the subset of devices is determined at the utility such that, based upon the determined capacity available, the utility can activate the program to manage the demand for the utility. Clearly, the Budike '105 reference does not teach or suggest utilizing a program at the utility and determining capacity associated with the delivery of the commodity at the utility.

As stated previously, each of the independent claims in the present application is directed to either a system or method that allows the utility of a commodity to manage the demand for the commodity through the use of a program developed at the utility. In this manner, the utility can manage demand for the commodity, specifically at times when the demand for the commodity is nearing the capacity of the utility to provide the commodity to its customers. In the Budike '105 patent, there is no teaching or suggestion of providing this ability to the actual utility of the commodity. Instead, the Budike '105 patent is simply directed to providing a master meter at a location being monitored where the master meter can receive inputs from multiple meters. The master meter receives the sensed information from the connected meters and provides this information to a computer 39 in which the consumption information can be monitored. Nowhere in the Budike '105 patent is there any teaching or suggestion of providing a program to a utility of a commodity such that the utility itself can manage demand for the commodity.

For at least the reasons set forth above, independent claims 1, 37, 38 and 42 are believed to be allowable over the combination of references cited by the Examiner in the Office Action.

In addition to the common limitations described above that are found in each of the independent claims 1, 37, 38 and 42, independent claim 37 further includes the limitations that an actual rate of consumption of the commodity and a rate of change of consumption induced by the activation of the program are determined. Based upon this information, at least one of an alternate rate and a billing adjustment is provided

to the customer as a function of the actual capacity managed at the related customer site by the program. In rejecting claim 2, which included similar limitations, the Examiner cited the Budike reference. However, the Budike '105 reference does not teach anywhere in its description of providing either an alternate rate or billing adjustment to the customer based upon the actual capacity managed at the customer site by activating the program. Clearly, this feature of independent claim 37 is not taught or suggested by any of the references cited by the Examiner.

Dependent claim 2-6, 43-47 depend directly or indirectly from independent claim 2 and 42, respectively, and are thus believed to be allowable based upon the above arguments for allowance as well as in view of the subject matter of each claims.

Specifically, claim 3 includes the step of determining an actual capacity of the commodity saved by activating the program. This limitation is clearly not shown in the Rector '676 patent cited by the Examiner. Instead, the Rector '676 patent completely disconnects service to a residence once the consumption of energy exceeds a threshold value. This determination is made simply by metering the amount of energy consumed at the residence after the owner has moved out and disconnecting the meter once the consumed energy exceeds a threshold. At no place in the Reactor '676 patent does the reference suggest determining an actual capacity of the commodity saved by activating a program, where the program includes a subset of the plurality of devices located at a customer site. Claim 3 thus allows the utility to monitor the amount of demand being consumed by the subset of devices and determine a capacity of the commodity that can be saved by selectively activating the program. Clearly, this feature is not taught or suggested by the Rector '676 patent.

Claims 4 and 45 further include the limitation of providing at least one of an alternate rate and a billing adjustment rebate to the customer as a function of the actual capacity managed at the customer site by activating the program. The portion of the Rector '676 patent cited by the Examiner, like the rest of the specification, provides absolutely no teaching of providing an alternate rate and billing adjustment

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to the customer as a function of the capacity managed. This feature is clearly not available in the subject matter taught by the Rector '676 patent.

Conclusion

Based upon the above arguments for allowance, claim 1-6, 37-38 and 42-47 are believed to be in condition for allowance and such action is respectfully requested. Further, since generic claims 1 and 42 are believed to be allowable, the applicant hereby requests allowance of dependent claims 7-36 and 48-67.

The Examiner is invited to contact the applicant's undersigned attorney with any questions or comments, or to otherwise facilitate prosecution of the present application.

Respectfully submitted,

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